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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/881,195	06/14/2001	Kazuyoshi Takeda	9319S-000230	5127

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EXAMINER

PROCTOR, JASON SCOTT

ART UNIT PAPER NUMBER

2123

DATE MAILED: 12/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/881,195	Applicant(s) TAKEDA, KAZUYOSHI	
	Examiner Jason Proctor	Art Unit 2123	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-11 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-11 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 October 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>12/2/2003</u> . | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

1. Claims 1-11 have been submitted for examination.
2. Claims 1-11 have been rejected.

Priority

3. Receipt is acknowledged of papers submitted under 35 U.S.C. § 119(a)-(d), which have been placed of record in the file.

Double Patenting

4. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

5. Claims 1-11 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 6-16 of copending Application No. 09/838,490. Although the conflicting claims are not identical, they are not patentably distinct from each other because the claims of the instant application recite the method performed by the system of claims 6-15 and the method of claim 16 in the copending application. The primary difference between the claims of the

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copending application and the instant application are the references to an output screen as a simulation result in the instant application where the copending application refers to "a memory that is accessible by both the evaluator and the simulator" (claim 7), however the instant application teaches that the output screen is referenced via shared memory, going so far as to expressly state that the shared memory may be video RAM (page 17, line 20 – page 18, line 4). The specification of the copending application contains a similar teaching with reference to a Visual [sic] Random Access Memory (page 3, line 18 – page 4, 8). As a result, the differences between the method of the instant application and the claimed system and method of the copending application would have been obvious to a person of ordinary skill in the art at the time of applicant's invention.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claim Rejections - 35 USC § 101

6. Claims 1-11 are rejected under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. MPEP 2106(II)(A) states

The claimed invention as a whole must accomplish a practical application. That is, it must produce a "useful, concrete and tangible result." *State Street*, 149 F.3d at 1373, 47 USPQ2d at 1601-02. The purpose of this requirement is to limit patent protection to inventions that possess a certain level of "real world" value, as opposed to subject matter that represents nothing more than an idea or concept, or is simply a starting point for future investigation or research (*Brenner v. Manson*, 383 U.S. 519, 528-36, 148 USPQ 689, 693-96); *In re Ziegler*, 992, F.2d 1197, 1200-03, 26 USPQ2d 1600, 1603-06 (Fed. Cir. 1993)). Accordingly, a complete disclosure should contain some indication of the practical application for the claimed invention, i.e., why the applicant believes the claimed invention is useful.

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7. Neither the method of claims 1-5 nor the system of claims 6-11 have a useful, concrete, and tangible result. Claim 1 recites "comparing a result of the reference with reference data prepared in advance so that an automatic evaluation is carried out" and none of claims 2-5 further clarify or limit this result. Claim 6 ~~recites~~ similarly concludes by performing a comparison and none of claims 7-11 further clarify or limit this result. Neither a comparison nor an automatic evaluation can be considered a useful, concrete, and tangible result.

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12/17/04

8. To expedite a complete examination of the instant application the claims rejected under 35 U.S.C. § 101 (nonstatutory) above are further rejected as set forth below in anticipation of applicant amending these claims to place them within the four statutory categories of invention.

Claim Objections

9. Claim 6 is objected to because of the following informalities: The word "adapoted" in line 8 appears to be a typographical error. Appropriate correction is required.

10. Claim 7 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. The limitations of claim 7 appear to be recited in claim 6 as "a simulation unit adapted to perform the simulation of an operation of the program and monitor a time when data renewal of the output screen

on which the simulation result is reflected becomes definite". If Applicant regards the limitations of claim 7 as further limiting those of claim 6, Examiner respectfully requests clarification.

Claim Rejections - 35 USC § 112

11. The following is a quotation of the second paragraph of 35 U.S.C. § 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

12. Claims 1-5 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

13. Claim 1 contains the phrase "performing the simulation at a time when data renewal of the output screen on which the simulation result is reflected becomes definite is reported" which renders the claim vague and indefinite. It is unclear to the Examiner how a simulation can be performed at a time when the result of the simulation is reported as definite. It is unclear how Applicant's invention can schedule a simulation to begin at the time when the simulation result becomes definite.

14. Further regarding claim 1, the phrase "a simulation to an arbitrary input event" is unclear in that the Examiner is not aware of the meaning of "a simulation to" an event. The Examiner presumes the intended language is "a simulation corresponding to an arbitrary input event" as found in the preamble of claim 6.

15. Claims 2 and 8 contain the phrase "a predetermined time defined in advance". It is unclear to the examiner whether Applicant's intent is to include two distinct limitations

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regarding the time or whether "a predetermined time" should be interpreted as synonymous with "a time defined in advance" and therefore repetitive.

16. Regarding claim 3, the limitations appear to establish that the time when the data renewal of the output screen becomes definite is the result of a logical sum operation of simulation results. It is unclear to the examiner how a logical sum operation on simulation results can result in a time measurement. If the explanation relies on the ambiguous phrase "based on data", such an explanation would again fail to particularly point out Applicant's invention as being vague and indefinite.

17. Claims not specifically mentioned are rejected by virtue of their dependence.

18. Appropriate correction is required.

Claim Interpretation

19. In the interest of compact prosecution, examiner makes the following claim interpretations in order to apply prior art to the claims. See *Ex parte Ionescu*, 222 USPQ 537 (Bd. Pat. App. & Inter. 1984).

20. Regarding claim 1, the Examiner interprets the limitation "performing the simulation at a time when data renewal of the output screen on which the simulation result is reflected becomes definite is reported" is interpreted as "performing the simulation of an operation when the data renewal of the output screen has been reported as definite".

21. Regarding claims 2 and 8, the phrase "a predetermined time defined in advance" is interpreted as "a predetermined time".

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22. Regarding claim 3, the limitations are interpreted as, "An automatic evaluation method as set forth in claim 1, wherein the time when the data renewal of the output screen becomes definite is established as the time when carrying out a logical sum operation of individual simulation results at predetermined intervals of time concludes."

Claim Rejections - 35 USC § 102

23. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

24. Claims 1-11 are rejected under 35 U.S.C. 102(b) as being anticipated by Triantafyllos et al. US Patent No. 5,233,611 hereafter referred to as Triantafyllos.

25. Regarding claim 1, Triantafyllos teaches a method for automatically evaluating a program (column 3, lines 40-69) operating on a target system (column 3, lines 55-59; column 12, lines 18-44) by referring to an output screen as a result of a simulation of an arbitrary input event (column 3, lines 62-69; column 4, lines 29-39; column 10, lines 4-25; column 10, lines 49-52), the method comprising:

using a semaphore to perform the simulation at a time when the output screen becomes definite and referencing the output screen in accordance with the time (column 8, line 64 – column 9, line 17; column 9, lines 45-55, column 10, lines 4-15), and

comparing the result of the simulation with data prepared in advance so that an automatic evaluation is carried out (column 10, lines 4-25; column 4, lines 29-39).

26. Regarding claim 2, Triantafyllos teaches that the method waits a predetermined amount of time to reference the output screen (LOOKFOR command description, column 5, lines 16-32; column 10, lines 35-48).

27. Regarding claim 3, Triantafyllos teaches that the time when the output screen becomes definite is determined by repeatedly sampling the screen memory until a predetermined time threshold is surpassed (column 10, lines 12-48). This is considered functionally equivalent to carrying out a logical sum operation of individual simulation results, since the method taught by Triantafyllos repeatedly scans the screen memory until a definite result of the simulation can be determined, this result being a Boolean true or false value.

28. Regarding claim 4, Triantafyllos teaches that the automated function test program includes a communication program, the communication program sends input events to the application under test (column 4, lines 20-29), and that the communication program signals completion of its task by writing a "done" message to a semaphore (column 4, lines 52-58). This is considered functionally equivalent to a "display rewriting completion event" to determine that the output screen has become definite.

29. Regarding claim 5, Triantafyllos teaches that the simulation is conducted discretely by iterating through the input characters of the test case (column 9, lines 49-55). Although Triantafyllos does not expressly state that the simulation stops when the

output screen is referenced, the nature of a discrete simulation comprising individual input events renders this behavior an inherent property of the simulation. In every embodiment disclosed by Triantafyllos, the simulation processes an input event and then idles while waiting for the next input event (ex. column 8, lines 24-50).

30. Regarding claim 6, Triantafyllos teaches a system for automatically evaluating a program (column 3, lines 40-69) operating on a target system (column 3, lines 55-59; column 12, lines 18-44) by referring to an output screen as a result of a simulation of an arbitrary input event (column 3, lines 62-69; column 4, lines 29-39; column 10, lines 4-25; column 10, lines 49-52), the method of the system comprising:

monitoring a predetermined amount of time to reference the output screen
(LOOKFOR command description, column 5, lines 16-32; column 10, lines 35-48).

performing the evaluation at a time when the output screen becomes definite and
referencing the output screen in accordance with the time (column 8, line 64 – column 9, line 17; column 9, lines 45-55, column 10, lines 4-15), and
comparing the result of the simulation with data prepared in advance so that an
automatic evaluation is carried out (column 10, lines 4-25; column 4, lines 29-39).

31. Regarding claim 7, Triantafyllos teaches that an application to be tested may be run on an emulator for a target platform (column 3, lines 53-69; column 12, lines 35-44). Triantafyllos does not expressly teach a time monitor portion of the simulation unit,

however does teach that the system waits a predetermined amount of time in order to establish that the simulation result is definite (column 10, lines 35-48). It is therefore inherent that the invention of Triantafyllos has means for monitoring time.

32. Regarding claim 8, Triantafyllos teaches that the method waits a predetermined amount of time to reference the output screen (LOOKFOR command description, column 5, lines 16-32; column 10, lines 35-48).

33. Regarding claim 9, Triantafyllos teaches that the time when the output screen becomes definite is determined by repeatedly sampling the screen memory until a predetermined time threshold is surpassed (column 10, lines 12-48). This is considered functionally equivalent to carrying out a logical sum operation of individual simulation results, since the method taught by Triantafyllos repeatedly scans the screen memory until a definite result of the simulation can be determined, this result being a Boolean true or false value.

34. Regarding claim 10, Triantafyllos teaches that the automated function test program includes a communication program, the communication program sends input events to the application under test (column 4, lines 20-29), and that the communication program signals completion of its task by writing a "done" message to a semaphore (column 4, lines 52-58). This is considered functionally equivalent to a "display rewriting completion event" to determine that the output screen has become definite.

35. Regarding claim 11, Triantafyllos teaches that the simulation is conducted discretely by iterating through the input characters of the test case (column 9, lines 49-55). Although Triantafyllos does not expressly state that the simulation stops when the

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output screen is referenced, the nature of a discrete simulation comprising individual input events renders this behavior an inherent property of the simulation. In every embodiment disclosed by Triantafyllos, the simulation processes an input event and then idles while waiting for the next input event (ex. column 8, lines 24-50).

Conclusion

Art considered pertinent by the examiner but not applied has been cited on form PTO-892.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Proctor whose telephone number is (571) 272-3713. The examiner can normally be reached on 8:30 am-4:30 pm M-F.

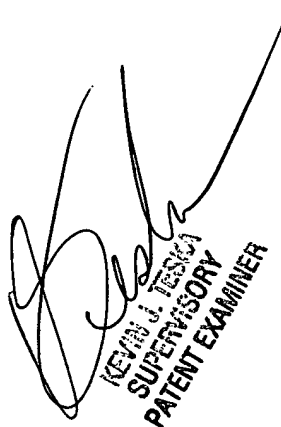
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin J Teska can be reached on (571) 272-3716. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Jason Proctor
Examiner
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